

# SAVE OUR LAKE

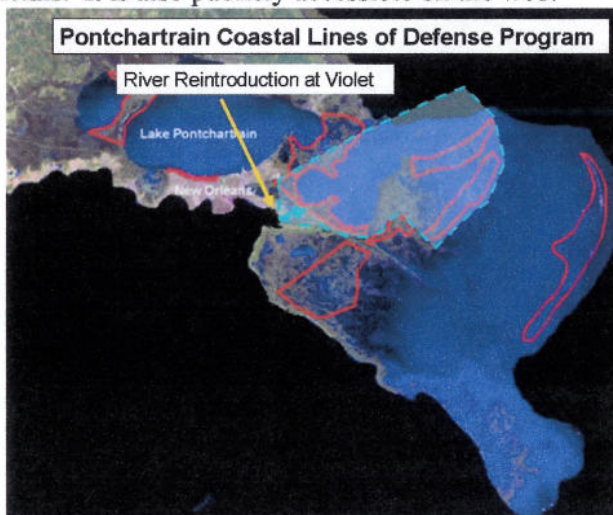
LAKE PONTCHARTRAIN BASIN FOUNDATION

## River Reintroduction at Violet, La. (Pontchartrain Coastal Lines of Defense Program) Lake Pontchartrain Basin Foundation – Coastal Sustainability Program

An enlarged River Reintroduction at Violet is one of ten priority project areas within the Pontchartrain Coastal Lines of Defense Program for the Pontchartrain Basin (**Figure 1**). All projects within this program provide significant habitat restoration and flood protection. Saltwater intrusion and lack of nutrients continue to impair wetland habitats throughout the wetlands around Lake Borgne, including the Central Wetlands and the Biloxi Marsh. The existing Violet diversion is far too small to have significant impact to these areas. The enlarged diversion in conjunction with a constriction of the MRGO channel at Bayou la Loutre is intended to restore historic habitats across the estuary north of Bayou la Loutre Ridge. Reestablishment of a cypress swamp will provide needed storm buffer and re-establishment of oyster reefs in the Biloxi marsh will be significant steps towards a sustainable estuary which will be more productive and provide flood protection.

The Pontchartrain Coastal Lines of Defense Program represents an integrated set of projects which is based on the highly vetted Comprehensive Habitat Management Plan for the Pontchartrain Basin (2006). The CHMP was developed over two years by a team of qualified engineers, biologists and physical scientists including representation from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, University of New Orleans, Southeastern University, LA Department of Nature Resources, Pontchartrain Institute for Environmental Sciences and LSU AgCenter. The plan was peer-reviewed by representatives from National Marine Fisheries Service, Natural Resource Conservation Service, LSU, U.S. Geological Survey, LA Geological Survey, The Nature Conservancy, and EPA Gulf of Mexico Program Office and the Coalition to Restore Coastal Louisiana.

The final CHMP is a federally approved plan by the EPA Region VI office. The Coalition to Restore Coastal Louisiana and the Louisiana Wildlife Federation have passed resolutions endorsing both the Comprehensive Habitat Management Plan and the Pontchartrain Coastal Lines of Defense Program. Since its release, the Pontchartrain Coastal Lines of Defense Program has been presented to numerous parish, state and federal officials. It is also publicly accessible on the web.



**Figure 1:** Location of the River Reintroduction at Violet. The project, in conjunction with the constriction of the MRGO channel, would be used to restore the historic wetland habitats pre-MRGO. This project is one ten projects in the Pontchartrain Coastal Lines of Defense Program.

Lake Pontchartrain Basin Foundation, 2006, Comprehensive Habitat Management Plan for the Pontchartrain Basin, <http://www.saveourlake.org/wetlands.htm> on April 2006

Lake Pontchartrain Basin Foundation, 2006, Pontchartrain Coastal Lines of Defense Program, <http://www.saveourlake.org/wetlands.htm> on April 2006

Lopez, J. A., 2006, The Multiple Lines of Defense Strategy to Sustain Coastal Louisiana, white paper, Lake Pontchartrain Basin Foundation



## **Fact Sheet – River Reintroduction at Violet**

**Project Name:** River Reintroduction at Violet

### **Coastal Planning**

Comprehensive Habitat Management Plan – endorsed by CRCL and LA Wildlife Federation  
NMFS & EPA nominated, candidate project for CWPPL PPL16

### **Project Location**

Region 1, Pontchartrain Basin, St. Bernard Parish

### **Problem**

The Central Wetlands were formerly an extensive cypress swamp. Re-growth from logging has been hindered by lack of fresh water, nutrients and sediments. The larger estuary including the Biloxi Marsh continue to convert to more saline habitat due to saltwater intrusion. Wetland loss is expected to accelerate if reintroductions are not constructed to increase productivity. Historic habitats when the estuary was more sustainable have had wholesale habitat shift. Oyster productivity declined dramatically after construction of the MRGO. Lack of the natural overbank flow of the river lowers productivity and allows salt stress. Similar issues have also been identified along the Mississippi coastline and Mississippi Sound.

### **Proposed Project Features**

- Several box culverts for controlled river discharge into the Violet canal or other conveyance canals
- Sediment enrichment should be considered to accelerate mineral accretion in the Central Wetlands

### **Goals**

- Restore historic habitats (see **Figure 2 and 3** for target habitat map):
  - Central Wetlands - Cypress Swamp 35,000 acres
  - Biloxi Marsh - Brackish marsh 100,000 acres
  - Mississippi Sound – brackish salinity 100,000 acres

### **Preliminary Project Benefits**

Convert 36,000 acres of brackish marsh to swamp and fresh marsh

Increase productivity of 100,000 acres brackish marsh in the Biloxi Marsh and 100,000 acres Mississippi Sound

### **Identification of Potential Issues**

Congressional deauthorization of the MRGO

### **Preliminary Construction Costs**

Total estimated construction cost is \$135M

### **Preparers of Fact Sheet**

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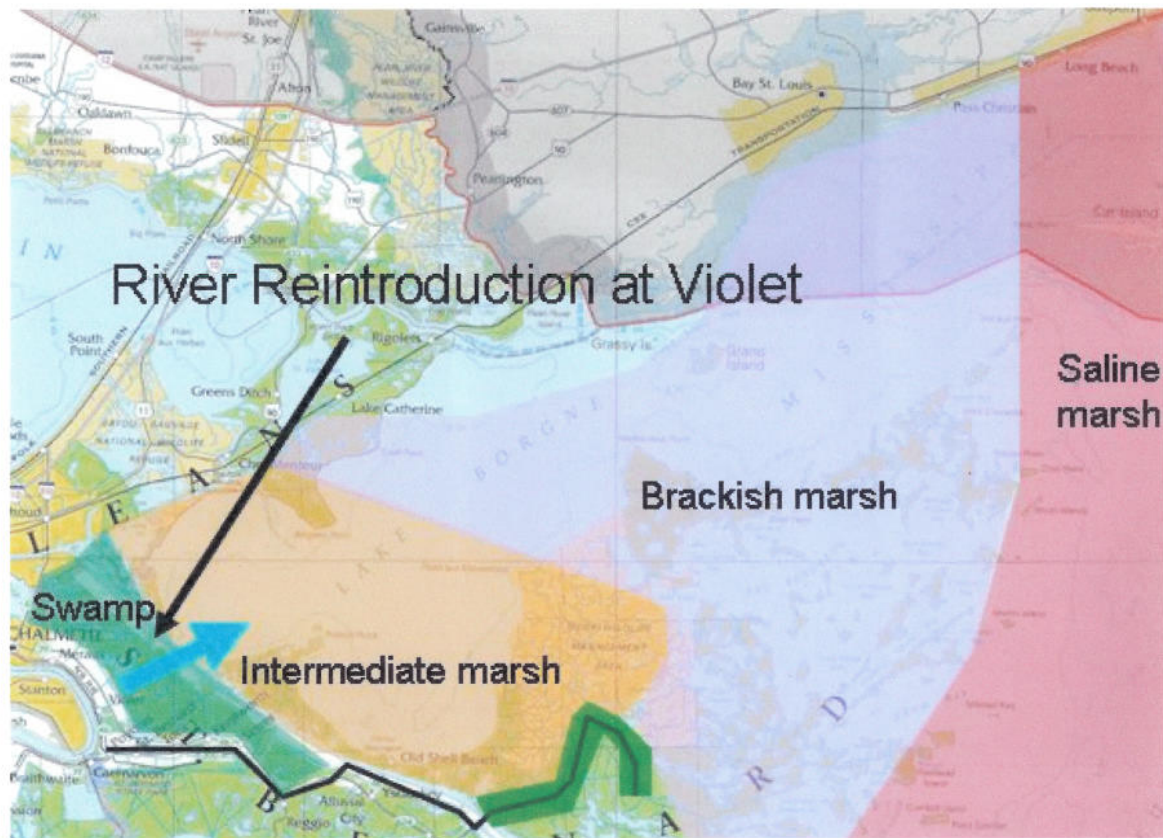
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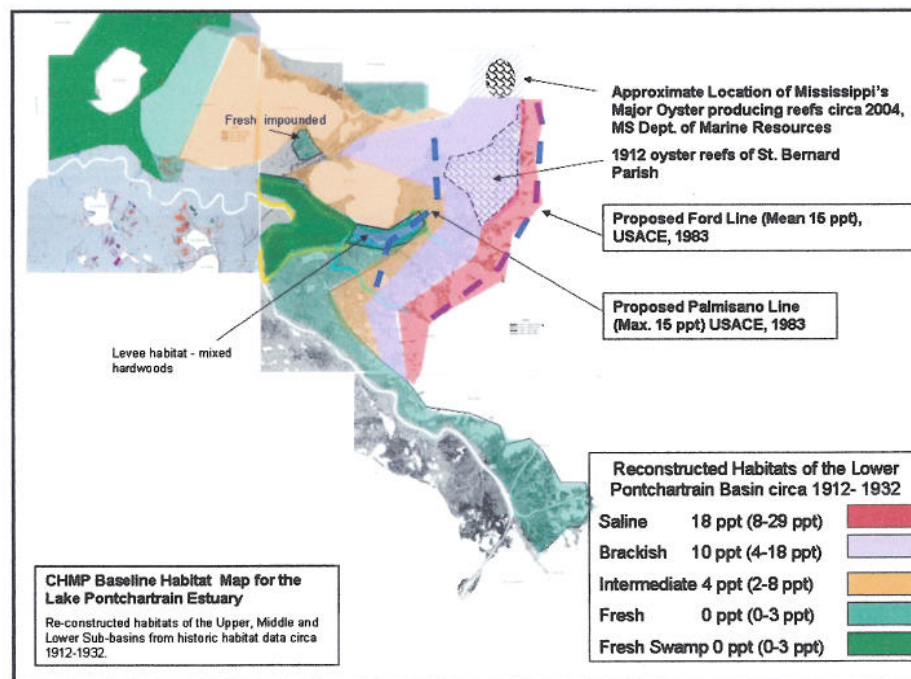
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**Figure 2:** River Reintroduction at Violet to restore swamp in the Central wetlands and other historic habitats including the Biloxi Marsh and Mississippi Sound.



**Figure 3:** Target habitat goals for the entire Pontchartrain Basin. The Violet reintroduction is proposed to manage the marsh north of Bayou la Loutre and Mississippi Sound. In conjunction with the reintroduction, the MRGO is to be modified to GIWW dimensions at Bayou la Loutre.